IN THE SPECIFICATION:

On page 1, line 1 please change the title as follows:

SPECTROMETER~~, IN PARTICULAR A REFLECTION SPECTROMETER~~

The heading on page 1, line 4 has been changed as follows:

~~Specification~~

BACKGROUND OF THE INVENTION

On page 2, after line 35 please insert a heading as follows:

GENERAL DESCRIPTION OF THE INVENTION

The paragraph beginning on page 3, line 5 has been changed as follows:

This task with reference to the reflection spectrometer according to the invention is solved by the fact that a ~~multiplicity~~ plurality of radiation sources ~~is~~ are provided, the radiation intensities of each being adjustable, and having an emission spectrum that is broadband, either per radiation source or for all radiation sources together, and each of which is directly coupled with an optical waveguide for emitted radiation, the radiation detector receiving the entire spectrum of the radiation occurring in the optical waveguide for detected radiation by diffuse and/or directional reflection and/or fluorescence and at least the intensity of a given wavelength can be processed in the evaluation unit as a function of at least one program selectable for the calculation of at least one parameter.

On page 8 after line 22 please insert a heading as follows:

BRIEF DESCRIPTION OF THE DRAWING

The paragraph beginning on page 8 line 23 has been changed as follows:

Other characteristics and advantages of the invention follow from the description of a practical example given below, with the aid of a drawing consisting of a single figure. This figure shows ~~the~~ a reflection spectrometer schematically.

On page 8 after 26 line please insert a heading as follows:

DETAILED DESCRIPTION

The paragraphs beginning on page 8 line 27 have been changed as follows:

As can be seen from the figure, a reflection spectrometer 1 according to the invention ~~consists~~ includes of a sensor 2, to which radiation can be led from radiation sources 10 – 15 through optical waveguides for emitted radiation 20 – 25 in order then to be directed onto a measured area which is not shown, such as the patient's skin, the surface of a food or similar. ~~Sensor~~ The sensor 2 is furthermore connected to a radiation detector 30 through an optical waveguide for detected radiation 40, where the radiation detector 30 in turn is connected to an evaluation unit 50.

Accordingly, in the case of the reflection spectrometer 1 shown, six radiation sources 10 – 15 are provided, for example, in the form of LEDs, of which always one pair emits red light (radiation sources 10, 13), blue light (radiation sources 11, 14) and green light (radiation sources 12, 15). In addition, the intensity of the radiation of each radiation source 10 – 15 can be selected by application of an adjustable current I_1 to I_6. Thus, using the six LEDs 10 – 15, radiation can be emitted essentially over the entire visible region of light at the free end of the sensor 2.

The paragraph beginning on page 9 line 32 has been changed as follows:

With the reflection spectrometer 1 according to the invention, it is ~~now~~ possible ~~for the first time~~ to adjust an emitted spectrum in a simple manner with the aid of the current to be applied to the LEDs, for example, as a function of a selected program, through a working connection between the evaluation unit 50 and the LEDs 10 – 15, while the evaluation unit 50 at the same time can select special wavelengths from the total spectrum detected by diffuse or directional reflection from the radiation detector 30 for the determination of the desired parameter. In other words, using the same hardware, it is possible to calculate different parameters, whereby for the said calculation one only needs to run different programs via the software of the reflection spectrometer.

IN THE ABSTRACT:

Please add an abstract as follows:

A reflection spectrometer provided with a probe to which the radiation of at least one radiation source can be transmitted by at least one radiation emission conductor transmitter in such a way that said radiation source can be directed to or in an investigated object and which makes it possible to transmit radiation to or in an investigated object and/or emitted by such object to a radiation receiver that can be connected to an evaluation unit by means of at least one radiation emission conductor. The disclosure also relates to a transmitted light spectrometer which includes a probe to which the radiation of at least one radiation source can be transmitted by at least one radiation emission conductor in such a way that the radiation source can be directed to or in an investigated object. The spectrometer includes at least one remote radiation emission conductor of the probe which is used for transmitting radiation to

or in an investigated object to a radiation receiver which can be connected to an evaluation unit.